

A STUDY OF TWICE FAILED SELECT FOR PROMOTION
OF LIEUTENANTS IN THE UNITED STATES
NAVY AND ITS COGNITIVE IMPACT ON
COST SAVINGS.

Jose Terlaje Nededog

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THESIS

A Study of Twice Failed Select for Promotion of
Lieutenants in the United States Navy and its
Cognitive Impact on Cost Savings

By

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) A Study of Twice Failed Select for Promotion of Lieutenants in the United States Navy and its Cognitive Impact on Cost Savings		5. TYPE OF REPORT & PERIOD COVERED Master's Thesis December 1975
7. AUTHOR(s) Jose Terlaje Nededog		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Postgraduate School Monterey, CA 93940		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Postgraduate School Monterey, CA 93940		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Naval Postgraduate School Monterey, CA 93940		12. REPORT DATE December 1975
		13. NUMBER OF PAGES 91
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The purpose of this thesis is two-fold: 1. It seeks to investigate the current statutes, regulations, instructions, and policies regarding the involuntary separation of officers resulting from failure to be selected for promotion to lieutenant commander. 2. It attempts to estimate a lower limit of real costs associated with each officer separation of this type.		

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Abstract #20 (cont'd)

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SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

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in the United States Navy and its Cognitive Impact on Cost Savings

By

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Lieutenant, United States Navy
B.A., University of Maryland, 1972

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1975

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1. It seeks to investigate the current statutes, regulations, instructions, and policies regarding the involuntary separation of officers resulting from failure to be selected for promotion to lieutenant commander.

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It is the author's hope that conclusions drawn from the data presented can be used by the Navy to more accurately evaluate whether it is more beneficial to the Navy to separate twice failed select officers or to retain them on active duty.

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I. INTRODUCTION

Every year, the Navy separates a certain number of naval officers as a result of their not being selected for promotion to the rank of lieutenant commander. As a matter of fact, the Navy in the past five years has separated an average of 191 lieutenants each year. From this administrative action a question arises. Is it more cost effective to separate Navy lieutenants who have twice failed to be selected for promotion than to retain them on active duty? This question is particularly significant during a period when the Navy is having junior officer retention problems. This retention problems is clearly expressed in the Officer Personnel Newsletters for December, 1973¹, October, 1974² and Spring 1975³, published by the Chief of Naval Personnel.

A. BACKGROUND

The increased awareness of defense spending has forced the military to be more acutely aware of an axiom which has always been true, even during wartime, but has been ignored largely because it involves so much honest and painful self-analysis. The basic fact is this: Military decisions must be thought of as essentially economic decisions in which maximization of our defense posture depends upon the effective utilization of the nation's resources which have been allocated in the form of tax dollars. And, as citizens become more critical of the

¹ Bureau of Naval Personnel, The Officer Personnel Newsletter, Washington, D. C., December, 1973, p. 3.

² Bureau of Naval Personnel, The Officer Personnel Newsletter, Washington, D. C., October, 1974, p. 3.

³ Bureau of Naval Personnel, The Officer Personnel Newsletter, Washington, D. C., Spring 1975, p. 2.

large allocation of resources to this end, the need for economically efficient decisions by the military becomes more pronounced.

As a result of this new, or more accurately, increased need for the application of economic criteria to military decisions making, many studies have been written dealing specifically with this problem.

Hitch and McKean in their book, The Economics of Defense in the Nuclear Age, present this new way of looking at military problems.

This is illustrated by the following statements:

"Essentially we regard all military problems as, in one of their aspects, economic problems in the efficient allocation and use of resources. We believe that this way of looking at military problems goes far toward reconciling the apparent conflict of view between the officers and officials who are responsible for defense and the officials and Congressmen whose primary interest is economy...except in determining the overall size of the military budget, where conflict between these points of view is inevitable."

Many other studies, both within the Defense Department and by civilian research groups function to aid the military in assuming this new peacetime role of efficiency expert.

Indeed one of the many tasks facing the Navy is that of analyzing its various costs in terms of its overall objective categories. This is nothing more than cost effectiveness at all levels of spending extending from the President's budget down to the smallest procurement or investment made by the Department of the Navy.

⁴ Charles J. Hitch and Roland N. McKean, The Economic of Defense in the Nuclear Age, Cambridge: Harvard University Press, 1963, p. v.

To the author's knowledge, none of the cost studies conducted to date, have attempted to measure the cost associated with the separation of twice failed select Navy lieutenants. The absence of any cost analysis in this area is due largely to the fact that this aspect of personnel management is governed by either federal laws or long standing policies. It, therefore, seems appropriate that some effort be made to collect and assimilate data concerning this particular category of officers, and then to transpose this data into a meaningful estimate of actual dollar costs.

B. OBJECTIVES

The objectives of this thesis are:

1. To study the current statutes, instructions, regulations, and policies regarding the separation of Navy lieutenants resulting from failure to be selected for promotion to lieutenant commander.
2. To estimate a lower limit of "real" costs which are associated with each officer separation.

Conclusions drawn from the data gathered will be presented along with derived costs estimates and possible alternatives. It is hoped that it will answer the question: Is it more cost effective to separate Navy lieutenants who have twice failed selection to lieutenant commander than to retain them on active duty?

II. METHODOLOGY

A. OBTAINING OF DATA

In the course of obtaining the data necessary for this thesis, several approaches were followed :

1. A study of the relevant statutes, regulations, instructions, and policies were examined.

2. A cost analysis study was made using data from the various cost literatures published by the department of the Navy and from direct information from various offices within the Bureau of Naval Personnel, Washington, D. C. and Navy Education and Training Command, Pensacola, Florida.

3. A questionnaire was mailed to Navy lieutenants who had twice failed selection to lieutenant commander, and were separated not later than June 30, 1975. The questions comprising the questionnaire were based on:

- a. Discussion with several active duty officers concerning what items should be considered in order to be able to form some conclusions as to the character and training of the officers involuntarily separated,

- b. The writer's personal experience in the Bureau of Naval Personnel responsible for interpreting and executing policies affecting involuntary separation of Naval officers.

A covering letter was mailed with the questionnaire. It explained the purposes of the study and requested the cooperation of those to whom it was addressed. A copy of this letter and of the questionnaire used are contained in Appendices A and B.

B. ANALYSIS OF DATA

The analysis of data gathered from the questionnaire with derived cost estimates is presented in Chapter IV. Conclusions drawn from the data gathered is delineated in Chapter V.

III. LIMITATIONS

There are many limitations inherent in any study involving personnel costs. The most obvious caution to be exerted in such a study is to insure that costs and quantities do not become synonymous with performance and quality. In the field of personnel this is an especially dangerous comparison to make, or even to suggest. It is not difficult to quantify the number of officers the Navy is required to separate each year. It is also not difficult to quantify the number of officers the Navy must procure. However, the problem of quantifying the quality of the individual officer becomes very complex and dependent upon many subjective factors that have never been quantified.

Additionally, a number of general assumptions must be made. These general assumptions should be kept in mind throughout the study:

1. A discount rate which is generally 10% in the military has not been employed.

2. Future pay increases are ignored. While future pay increases can reasonably be expected, it has been ignored due to the fluctuating and uncertain magnitude of any such increases.

3. Reserve officers are not included in the study. Although Reserve officers are subject to involuntary release to inactive duty resulting from failure of selection for promotion two or more times, this study was limited only to Regular Navy lieutenants. Reserve lieutenants were eliminated from the study because they are subject

to separate provisions of the law.

Reserve lieutenants who fail selection for promotion two or more times by the active duty promotion selection board, are released to inactive duty by policy only. Reserve officers released to inactive duty, retain their reserve commission and may continue to affiliate with the Navy through the various Reserve programs. In case of national emergency they are recalled to active duty and their services again are fully utilized. On the other hand, the involuntary separation of Regular Navy lieutenants is required by statutory provisions. Once separated, they no longer have any connection with the Navy unless they voluntarily request and are approved for a Reserve commission in the inactive reserve.

IV. ANALYSIS

A. FACTUAL ACCOUNT OF QUESTIONNAIRE

On December 19, 1974, the Navy reported a total of 273 Regular Navy lieutenants who failed selection for promotion the second time, and two women officers who have completed 13 years commission service who were not on the promotion list.⁵ This is a total of 275 Navy lieutenants which represents approximately 19 percent of total eligible for promotion.

These officers were all informed of their status early in 1975 and were all scheduled for separation on or prior to June 30, 1975.

The author's original intention was to mail the questionnaire to all 275 lieutenants listed on the report. However, only 260 questionnaires were mailed. The reason for this is as follows:

1. One officer was medically discharged.

2. Ten officers were within two years of becoming eligible to retire with pay. The Navy's current policy is to retain this category of officers by offering them reserve appointment for the purpose of continuing them on active duty until retirement eligibility is attained. These officers were offered and have accepted the Reserve appointments.

3. Four officers were not included on the mailing list because of unanticipated difficulty encountered in getting correct addresses.

B. TABULATION

In compiling the individual questionnaire returns, the results of a number of questions were carefully tabulated by officer designators.

⁵ Bureau of Naval Personnel, Director, Promotions and Retirement Division, Memorandum, Pers-481-b1, December, 1974.

This method of tabulation was done in order to clarify the number of officers in each group who responded to the questionnaire. Definition of the designator is in accordance with the Navy Register.⁶ In tables and charts in which these groups are used, they will be referred to by the identifying designator defined as follows:

<u>DESIGNATOR</u>	<u>DEFINITION</u>
1100	A line officer unrestricted in the performance of duty.
1110	A line officer unrestricted in the performance of duty who is qualified in surface warfare.
1120	A line officer unrestricted in the performance of duty who is qualified in submarine warfare.
1160	A line officer unrestricted in the performance of duty who is in training for surface warfare.
1310	A line officer unrestricted in the performance of duty who is qualified for duty involving flying heavier-than-air, or heavier and lighter-than-air type aircraft as a pilot.
1320	A line officer unrestricted in the performance of duty who is a member of the aeronautical organization who is a flight officer.
1350	A line officer unrestricted in the performance of duty who is a member of the aeronautical organization who is not a pilot or a flight officer.

⁶ Bureau of Naval Personnel, Register of Commission and Warrant Officers of the United States Navy and Reserve Officers on Active Duty, NAVPERS 15,0818, U.S. Government Printing Office, Washington, D.C., December 31, 1974, pp. VII-VIII.

<u>DESIGNATOR</u>	<u>DEFINITION</u>
1410	A line officer restricted in the performance of duty who is an Engineering Duty Officer (Ship Engineering).
1510	A line officer restricted in the performance of duty who is an Aeronautical Engineering Duty Officer (Aeronautical Engineering).
1520	A line officer restricted in the performance of duty who is an Aeronautical Engineering Duty Officer (Aviation Maintenance).
1610	A line officer restricted in the performance of duty who is a Special Duty Officer (Cryptology).
1630	A line officer restricted in the performance of duty who is a Special Duty Officer (Intelligence).
2100	A staff corps officer who is a member of the Medical Corps.
3100	A staff corps officer who is a member of the Supply Corps.
5100	A staff corps officer who is a member of the Civil Engineer Corps.

Tabulation of the 260 questionnaires mailed showed seven or 2.7 percent were returned by the Post Office Department marked unclaimed. Of the remaining 253 questionnaires, 160 or 63.2 percent were completed and returned. A total of 93 or 36.7 percent did not respond. Table I shows the responses from the questionnaires and the results.

STATISTIC OF QUESTIONNAIRES SHOWING BY DESIGNATOR THE NUMBER OF USN LTS
 TWICE FAILED SELECT FOR LCDR, NUMBER OF QUESTIONNAIRES MAILED,
 NUMBER RETURNED BY POST OFFICE, NUMBER OF RESPONSES AND PERCENT OF RESPONSES

DESIGNATOR	NUMBER OF OFFICERS WHO FAILED SELECTION FOR PROMOTION TO LCDR		NUMBER MAILED	NUMBER RETURNED BY POST OFFICE		NUMBER OF RESPONSES	PERCENT OF RESPONSES OF TOTAL MAILED AND AND NOT RETURNED BY POST OFFICE
1100	3		2	0	0	0	0
1110	74		70	2	38	55.9	
1120	13		13	0	9	69.2	
1160	1		1	0	1	100	
1310	86		82	4	49	62.8	
1320	48		44	1	29	67.4	
1350	3		3	0	3	100	
1410	7		7	0	5	71.4	
1510	1		1	0	1	100	
1520	1		1	0	1	100	
1610	5		5	0	4	80	
1630	3		3	0	3	100	
2100	2		2	0	0	0	
3100	25		23	0	15	65.2	
5100	3		3	0	2	66.7	
				275	260	7	160
							63.2

C. DATA

The questionnaire, Appendix B, was divided into six major areas of coverage to help in analyzing relevant information.

FIRST AREA. (Questions 1-17). These are general information questions to determine the status of the officer and the Navy's possible investment in that officer.

SECOND AREA. (Questions 18-23). These questions were asked in order to obtain some information regarding the performance of the individual officer and to ascertain some possible reasons for his failure to be selected for promotion. Through this line of questioning the writer hoped to determine whether the officer was a satisfactory performer and should have been considered for further continuation on active duty as a Reserve officer or enlisted man.

Obviously, some degree of bias was expected since an officer may be reluctant to admit that he had performed less than satisfactorily. However, it was felt that responses to these questions and the questions from other areas of the questionnaire would provide relevant data which could be analyzed to determine to a certain degree the officer's performance.

THIRD AREA. (Question 24). This question was asked in order to determine whether the officer intended to make the Navy a career.

FOURTH AREA. (Questions 25-27). The questions asked were to determine if the officer under the circumstances would be willing to

accept feasible alternatives for the purpose of continuing on active duty. Two possible alternatives were presented to the officer:

1. Acceptance of a Reserve appointment and continue on active duty, or
2. Enlistment for purpose of continuing on active duty as an enlisted man.

FIFTH AREA. (Questions 28-32). These were general questions relevant to the officer's separation cost. Answers to these questions provided information regarding how much it would cost to separate a twice failed select Navy lieutenant under current statutory provisions.

Specifically, Title 10, U.S. Code, Section 6382 states that Regular officers involuntarily separated for failure of selection for promotion are entitled by law for a lump-sum payment as follows:

"Each officer discharged under this section is entitled to a lump-sum payment equal to two months' basic pay at the time of discharge multiplied by the number of years of total commissioned service as computed under section 6387 of this title but the payment may not be more than two years' basic pay....However, no person is entitled to a lump-sum payment under this section that is more than \$15,000."⁷

In addition to severance pay as required by statutory provisions, other costs are also incurred. These costs are:

1. Lump-sum payment of leave, and
2. Travel pay.

Responses to questions 28-32 provide information whereby cost estimates can be made for leave and travel pay.

⁷ United States Code, Title 10 - Armed Forces, U.S. Government Printing Office, Washington, D. C., 1971, Vol. 2, p. 1824.

SIXTH AREA. (Question 33). This question was asked to determine respondents' feelings regarding the Navy's management policies of Navy lieutenants who have failed to be selected for lieutenant commander.

DISCUSSION, FIRST AREA, GENERAL INFORMATION

Questions 1 through 5 were included primarily as a check on the accuracy of the category of officers under study and to determine the source of commissioning. These questions served two general purposes:

1. To determine whether the officer was originally a Reserve officer who had gone through a rigorous augmentation selection board to be a regular officer, and
2. To determine some estimates of the officer's pre-commissioning learning cost.

Table II shows that of the total responses, 40 were former USNR officers who received their regular commission through the augmentation board. Information received from the Bureau of Naval Personnel and the augmentation article from the Officer Personnel Newsletter indicates that selection of a Reserve officer for augmentation into the regular Navy depends on:

- a. Outstanding performance.
- b. Outstanding fitness reports.
- c. Experience.
- d. Outstanding educational background and has potential for completing a technical graduate education.
- e. Strong recommendation from the Commanding Officer.

TABLE II

LISTING BY DESIGNATOR TWICE FAILED
 SELECT LIEUTENANTS WHO HAVE
 PREVIOUS USNR APPOINTMENTS

<u>DESIGNATOR</u>	<u>NUMBER IN CATEGORY</u>	<u>NUMBER WITH PREVIOUS USNR DESIGNATOR</u>	<u>PERCENT IN CATEGORY</u>
1110	38	6	15.78
1120	9	1	11.11
1160	1	1	100
1310	49	10	20.40
1320	29	15	51.72
1350	3	0	00
1410	5	0	00
1510	1	0	00
1520	1	0	00
1610	4	1	25
1630	3	2	66.67
3100	15	3	20
5100	2	1	50
<hr/>			
TOTAL	160	40	25%

Past selections have indicated that only those "Head and Shoulders" type Reserve officers were selected for augmentation. Thus, it can be assumed that up to the point of selection for regular appointment, this group of officers are highly competitive.

Tabulation of responses to question 5 show the following source of commissioning or programs and the number of officers who were commissioned under each of the programs:

<u>PROGRAM</u>	<u>NUMBER</u>
Naval Academy	37
Officer Candidate School (OCS)	23
Naval Aviation Candidate (NAVCAD)	30
Aviation Officer Candidate (AOC)	11
Aviation Reserve Officer Candidate (AVROC)	1
Naval Reserve Officer Training Corps (NROTC) (Regular)	29
Naval Reserve Officer Training Corps (NROTC) (Contract)	6
Navy Enlisted Scientific Education Program (NESEP)	23
TOTAL	160

Table II shows the designation of the officers at the time they were notified of their scheduled involuntary separation. As can be readily seen, the aviation community makes up the majority of categories of officers who failed to be selected for promotion. Major reason that can be accounted for this is the fact that the aviation community comprised one of the largest communities in the Navy. The fact also remains that training aviators in the Navy is very costly as will be observed in Chapter IV of this thesis.

TABLE III

DESIGNATORS OF THE OFFICERS AT THE TIME THEY WERE NOTIFIED OF
THEIR FAILURE OF SELECTION TO LCDR

<u>DESIGNATOR</u>	<u>NUMBER RESPONDED</u>
1110	38
1120	9
1160	1
1310	49
1320	29
1350	3
1410	5
1510	1
1520	1
1610	4
1630	3
3100	15
5100	2

Questions 6 through 9 were intended to determine service school attended including colleges and or universities of which the Navy provided the costs. Based on responses received, it shows that there were 355 different service school courses attended and completed by one or more officers. These courses do not include courses attended as enlisted men by those officers with previous enlisted service. Duration of the courses range from a one week "Firefighting" course to a 20 month "Flight Training" course. Technical skills learned range from computer programming to highly sophisticated nuclear weapons.

Table IV shows the college or university attended by the officers who responded to the questionnaire. Only those schools where cost is paid by the Navy are shown.

Specifically, question 9 was intended for responses only where the officer took his postgraduate school under a Navy sponsored program. However, it appears that the question was not totally clear because many officers responded to having taken postgraduate studies not necessarily sponsored by the Navy. Responses in this area seems to indicate that some have taken postgraduate education on a part time basis. In view of the possible misinterpretation of the question, only those officers who have indicated that they have taken postgraduate work at the Naval Postgraduate School, Monterey, California are tabulated. It should be realized that this is a low number. A great majority of the officers have achieved the graduate level degrees through off duty studies, using their own funds, tuition aids or in-service veterans educational assistance. However, since it is not clear as to which of these costs could be applied as a Navy's investment cost in the officer, no attempt was made to tabulate them. Thus, any postgraduate costs inferred in this thesis is to be interpreted as meaning only those of the Naval Postgraduate School, Monterey, California.

TABULATION OF THE OFFICERS WHO TOOK UNDERGRADUATE STUDIES AT A COLLEGE
OR UNIVERSITY OF WHICH THE NAVY PAID THE EXPENSES

DESIGNATOR	NUMBER RESPONSES	CIVILIAN COLLEGE/UNIVERSITY		MILITARY		TOTAL UNDER NAVY COST	% OF TOTAL RESPONSES
		NESEP/INSERV	NROTC (R)	USNA	NPGS		
1110	38	12	11	8	0	31	81.5
1120	9	2	2	3	0	7	77.8
1160	1	0	0	0	0	0	00
1310	49	2	12	16	8	38	77.6
1320	29	5	1	4	2	12	41.4
1350	3	2	0	1	0	3	100
1410	5	4	0	1	0	5	100
1510	1	0	1	0	0	1	100
1520	1	1	0	0	0	1	100
1610	4	1	0	1	0	2	50
1630	3	1	0	0	0	1	33.3
3100	15	1	2	3	0	6	40
5100	2	1	0	0	0	1	50
TOTAL	160	32	29	37	10	108	67.5

As can be readily seen on Table IV, the 160 officers who completed the questionnaire 108 or 67.5 percent have received their undergraduate education at either a civilian institution or military school at which the Navy paid the cost. Further, it is noteworthy that of those group of officers shown on Table IV NESEP and Naval Academy ranks as top in number. According to the figures in the Officer Personnel Cost, WOS 71-4 and direct information received from the Bureau of Naval Personnel, these two groups are very expensive source of officer procurement.

1. NESEP - NESEP students are selected from top enlisted and are sent to a four year college at the Navy's expense. These students retained their military status receiving full pay and allowances while undergoing a four year undergraduate program. The average NESEP enlisted pay grade is E-6 and married.

2. MIDSHIPMEN - Midshipmen are selected to the Naval Academy on a very competitive basis. These officers prior to their commissioning receive monthly allowances plus all costs necessary on their four years at the Naval Academy.

Table V is a tabulation of postgraduate school attended. Of the 160 who responded to the questionnaire 28, or 17.5 percent indicated that they had postgraduate education from the Naval Postgraduate School, Monterey, California.

The results from questions 10, 11 and 12 showing the marital and dependency status of the officers responding to the questionnaire are presented in Table VI. From this it may be seen that 88.75 percent

TABLE V

TABULATION OF OFFICERS WHO COMPLETED POSTGRADUATE EDUCATION

<u>DESIGNATOR</u>	<u>NUMBER OF RESPONSES</u>	<u>GRADUATE EDUCATION AT NPGS</u>	<u>% OF TOTAL RESPONSES</u>
1110	38	10	26.3
1120	9	1	11.1
1160	1	0	00
1310	49	10	20.4
1320	29	3	10.3
1350	3	0	00
1410	5	2	40
1510	1	0	00
1610	4	1	25
1630	3	1	33.3
3100	15	0	00
5100	2	0	00
<u>TOTAL</u>	<u>160</u>	<u>28</u>	<u>17.5</u>

of these officers were married at the time they were notified of having twice failed select for promotion, as compared to 8.75 percent who were single without dependents. The remaining 2.50 percent were divided between those who were previously married or not married but have dependents. Questions 11 and 12 specifically asked for dependents 12 years and older and dependents with less than 12 years old. This distinction was originally intended in order to determine travel cost of dependents. These questions, however, are no longer valid since age for travel purposes is no longer a factor with respect to travel allowances. Thus, dependency are tabulated without consideration of age.

TABLE VI
MARITAL AND DEPENDENCY STATUS OF OFFICERS

<u>STATUS</u>	<u>NUMBER</u>	<u>PERCENT OF TOTAL RESPONSES</u>
Married with dependents	142	88.75
Single without dependents	14	8.75
Previously married and single with dependents	4	2.50

Responses to questions 13 through 17 indicate that the active duty of the officers, including enlisted service, range from 8 years to 17 years and 11 months. Average number of moves of which the officer received travel pay and movement of household is 5.131. Basic pay range from

\$1,140.00 to \$1,384.20 as a result of increment increases depending on length of service. Special pay which is in addition to basic pay, BAS and BAQ range from \$185.00 to \$265.00. Special pay is normally given for reason of hazardous duty or special duty such as Flight pay, Submarine pay, etc. Special compensation given as incentive to continue on active duty are also given to a limited number of officers with special skill and qualifications. Total special compensation received among those officers who responded is \$84,100.00.

DISCUSSION, SECOND AREA, PERFORMANCE EVALUATION

While it is impossible to get information regarding the reasons why an officer failed selection for promotion, questions 18 through 23 of the questionnaire attempts to obtain some information as to whether the officer was aware of his assignments and whether or not he feels that his assignments may have some relevancy to his failure of selection. Additionally, these questions attempts to establish whether the officer made any attempt to improve his career pattern and chances for promotion by contacting the Bureau of Naval Personnel specifically his detailer. Responses to questions 18, 19 and 20 are provided as follows:

Question 18: Were you aware when you first failed of selection for promotion?

YES	136	85% of total responding
NO	24	15% of total responding

Question 19: Do you feel that the reason for your non-selection for promotion was because of the lack of career enhancing billet which you were assigned to?

YES	81	51% of total responding
NO	79	49% of total responding

Question 20: When you knew that you failed of selection for promotion the first time, did you try to reach your detailer to discuss reassignment to a billet that may be more career enhancing?

YES	61	38% of total responding
NO	99	62% of total responding

While the foregoing questions do not disclose how many of the officers have contacted their detailer for assistance, it is nevertheless felt that some significance must be attached to the fact that contribution of their non-selection is partially in the Navy's management in their career patterns.

Responses to questions 21, 22 and 23 are as follows:

Question 21: During the time that you held a commission in the Navy or Naval Reserve, did you receive any (one or more) unsatisfactory or unfavorable fitness reports?

YES	4	2.5% of total responding
NO	156	97.5% of total responding

Question 22: If your answer to question 21 above is YES, do you feel that this fitness report(s) was (were) unjustified (please mark only one answer)?

DEFINITELY UNJUSTIFIED	1	.7% of total responding
SOMEWHAT JUSTIFIED	3	1.8% of total responding
COMPLETELY JUSTIFIED	0	

Question 23: What effect did this (these) report(s) have in your failure of selection for promotion?

TREMENDOUS EFFECT	0	
GREAT EFFECT	0	
LITTLE EFFECT	4	2.5% of total responding

Of the total responding to the questionnaire, only 4 or 2.5% have indicated that they have unsatisfactory or unfavorable fitness report during the period they held their commissions in the Navy. However, they all feel that the specific unsatisfactory or unfavorable reports have little effect in their non-selection for promotion.

DISCUSSION, THIRD AREA, CAREER INTENTION

Question 24, although considered superfluous for this group of officers, it was considered relevant since records in the Bureau of Naval Personnel have revealed that some officers have resigned their commissions even after completion of approximately 11½ years of service. Thus, this question was intended to determine if any among the twice failed select Navy lieutenants had not really intended to make the Navy a career. For those who did not intend to make the Navy a career, the assumption would be that it makes no difference whether this officer failed select or not, the loss of the Navy's investment in that officer cannot be prevented. It is noteworthy, however, that responses received regarding this particular question show that of the 160 who completed the questionnaire, all or 100% have indicated that the Navy is definitely their career.

DISCUSSION, FOURTH AREA, WILLINGNESS TO CONTINUE UNDER AN ALTERNATIVE ACTION

Questions 25, 26 and 27 were asked in the light that such action are feasible without legislative inactment. Under current policies, a twice failed select officer who is within two years of becoming eligible to retire with pay is given the opportunity to resign his regular commission and accept a Reserve appointment in order to continue on active duty as a Reserve officer solely for the purpose of attaining retirement eligibility.⁸

This same policy can be applied to a twice failed select officer who is not within two years of becoming eligible to retire with pay, but have shown potential or possess skills that would be of definite asset to the Navy.

In response to questions 25, 26 and 27, the following are provided:

Question 25: If the Navy offers you an appointment in the Naval Reserve after you are discharged for the purpose of continuing on active duty, would you accept the appointment?

YES	118	76% of total responding
NO	37	24% of total responding

Five were undecided and were not included in the tabulation.

⁸ Bureau of Naval Personnel, Officer Development and Distribution Manual, November 23, 1974, Chapter VII, Section 7104(h), p. VII-4.

Question 26: If you cannot be appointed in the Naval Reserve, but the Chief of Naval Personnel offered you the opportunity to enlist after discharge in order to serve on active duty in an enlisted status would you enlist?

YES	36	23% of total responding
NO	121	77% of total responding

Three were undecided and were not included in the tabulation.

Question 27: If your answer to 26 above is YES what would be the lowest enlisted pay grade you will be willing to enlist in?

E-3	00	00% of total YES responses
E-4	00	00% of total YES responses
E-5	02	06% of total YES responses
E-6	02	06% of total YES responses
E-7	10	28% of total YES responses
E-8	04	10% of total YES responses
E-9	18	50% of total YES responses

From the foregoing statistics, it can be seen that of the 160 responses to the questionnaire, 118 or 73.75% are willing to become USNR officers for the purpose of continuing on active duty. However, only 36 or 23% of total responding are willing to enlist and continue on active duty as enlisted men. It is also evident that although several were desirous of continuing on active duty as enlisted men, only 4 or 10 percent of the total desiring to enlist were willing to enlist in pay grades lower than E-7. The majority would accept enlistment only in the top three enlisted pay grades.

DISCUSSION, FIFTH AREA, GENERAL COST INFORMATION

Questions 28, 29, 30, 31 and 32 were asked in order to accumulate data regarding separation cost. Responses to question 28 indicate that the average number of days leave at date of separation is 55.13. Since, the officer has the right to receive a lump-sum payment for accrued leave not used at date of separation, this amount is definitely a separation cost for the Navy. Responses to question 29 show that 90 or 56.3% were filling billets which required contact relief. This means that before the lieutenant is separated, he must be replaced by another officer. The Navy must pay for the replacement cost.

Responses to question 30 indicate that 103 were serving on board ship, squadron or overseas station. Responses to questions 31 and 32 show that 115 will make a home of selection for travel purposes. Of this number, 67 have indicated that the home of selection is farther away than the home of record. This indicated a greater travel expense which will be borne by the Navy. A close approximation of these costs, however, is not available to the writer. Accordingly, the cost analysis for this part of the separation cost is based on the average "Permanent Change of Station" cost per move provided by the Bureau of Naval Personnel.

DISCUSSION, SIXTH AREA, GENERAL COMMENTS ON NAVY MANAGEMENT POLICIES REGARDING TWICE FAILED SELECT OFFICERS

On question 33, individual comments and/or recommendations were solicited regarding the Navy's policy and/or management of twice failed

select officers. Comments and recommendations including the frequency of the comments are indicated in Appendix C. It should be noted that while a few of the comments were bitter and specifically pointed at particular individuals or organization in the Navy, the majority indicated a sincere interest in the question as a whole and a desire for pointing out possible areas the respondents see as problems in this group of officers. Thus, only those comments considered relevant to the question were tabulated and provided in Appendix C. The relevant comments are not verbatim of the individual officer, but rather a summation of the general subject from which the specific comments were made.

D. INVESTMENT COST ANALYSIS

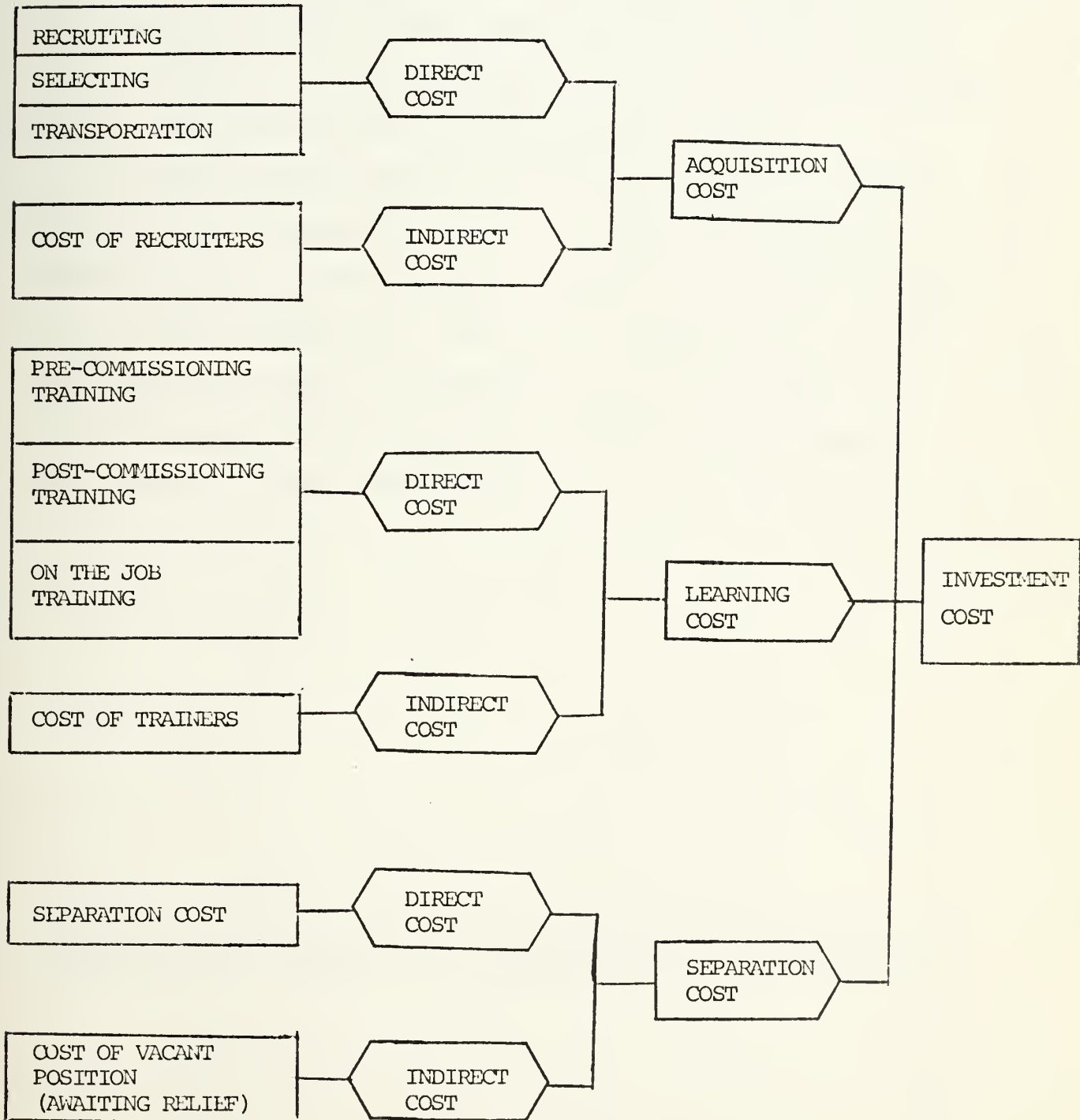
To fully understand the cost analysis of the involuntary separation of Regular Navy lieutenants, it is necessary to understand the investment attributed to an officer with respect to the various cost factors involved in procurement, training, and separation. The cost analysis model indicated in Figure 1 will be used for the purpose of determining investment cost. The three basic elements of cost for this model are:

1. Acquisition cost
2. Learning cost
3. Separation cost

The costs provided are present value cost estimates and includes direct and indirect costs. Per capita estimates versus actual costs were used since actual costs involve many cost factors peculiar to each individual. Thus, to obtain actual costs regarding each individual officer would (in addition to requiring extensive research beyond the scope of this thesis), not enhance the accuracy of the analysis.

Figure 1

MODEL FOR MEASURING THE COST IN A NAVY LIEUTENANT
FOR THE FIRST 11.5 YEARS OF SERVICE



1. Acquisition Cost.

Acquisition cost includes all of the direct costs of recruiting such as recruiter's pay, selecting, and transporting recruits, etc., as well as certain indirect costs such as facilities costs, clerical pay, advertising, etc. The funds expended on potential officers prior to their commissioning are spent with the expectation that the candidates will be commissioned and become productive naval officers.

The average acquisition cost for each officer varies by the type of program he was originally recruited for. Cost data used for the acquisition cost in this analysis is based on the average cost presented in the Officer Personnel Costs, WOS-71-4.⁹ The cost data are aligned with the relevant source of commissioning of the 160 respondees of the questionnaire. Table VII shows the relevant average acquisition cost for each of the programs indicated.

⁹ Naval Personnel Research and Development Laboratory, Officer Personnel Costs, WOS-71-4, Washington, D. C., March 1971.

<u>PROGRAM (SOURCE OF ACQUISITION)</u>	<u>AVERAGE COST*</u>
Naval Academy	35.00
Officer Candidate School (OCS)	\$1,397.00
Naval Aviation Candidate (NAVCAD)	1,397.00
Aviation Reserve Officer Candidate (AVROC)	1,397.00
Aviation Officer Candidate (AOC)	1,397.00
Naval Reserve Officer Training Corps (NROTC) (Contract)	50.00
Naval Reserve Officer Training Corps (NROTC) (Regular)	50.00
Navy Enlisted Scientific Education Program (NESEP)	35.00

*NOTE: Average costs are derived from the Officer Personnel Costs, WOS-71-4, March 1971 published by the Naval Personnel Research and Development Laboratory.

2. Learning Cost.

In addition to the acquisition costs that must be incurred, learning cost must also be incurred. Learning cost are operationally defined as the cost incurred while an individual achieves the level of productivity that is normally expected in a given position. Thus, when an officer candidate has been selected, additional investments are made prior to sending him to his first assignment. Such investment are classified into two categories:

- a. Pre-commissioning costs
- b. Post-commissioning costs

(1) Pre-commissioning costs. These costs include formal education and training. Various programs and institutions such as the Naval Academy at Annapolis, Naval Reserve Officer Training Corps (NROTC), at various colleges and universities throughout the country, and the Officer Candidate School (OCS) at Orlando, Florida are maintained to provide the needed training and education.

The average pre-commissioning costs under the eight different programs indicated in this study are shown on Table VIII.

(2) Post-commissioning costs. After an officer has been successfully commissioned, the Navy continues to make investment in him through further training and education. These are categorized as post-commissioning costs. (i.e. classified Fleet Schools, Staff Corps Schools, Flight Schools, Postgraduate Education, Technical Schools). Instructors must be paid, supplies must be furnished, and equipment and

PRE-COMMISSIONING COSTS (AVERAGE)

<u>PROGRAM</u>	<u>AVERAGE COST PER CAPITA</u>
Naval Academy	\$ 48,674.00
Naval Reserve Officer Training Corps (NROTC) (Regular)	12,244.00
Naval Reserve Officer Training Corps (NROTC) (Contract)	5,437.00
Officer Candidate School (OCS)	2,822.00
Naval Aviation Candidate (NAVCAD)	108,228.00
Aviation Reserve Officer Candidate (AVROC)	2,868.00
Aviation Officer Candidate	5,200.00
Navy Enlisted Scientific Education Program (NESEP)	43,280.00

NOTE: Average costs are derived from the Officer Personnel Costs, WOS-71-4, March 1971 published by the Naval Personnel Research and Development Laboratory, except for the NESEP Program.

The average cost for the NESEP Program is derived from available data obtained direct from the Bureau of Naval Personnel and from a number of NESEP source officers.

buildings must be purchased and maintained. Even when private educational institutions are used for Fleet Schools, tuition and book allowances are involved.

Table IX contains examples of the various school course costs which may be applied to the per capita worth of the officer. The costs are derived from the latest available per capita cost of training that can be obtained by this writer. These courses are just a sample of the 355 courses attended by one or more of the respondents to the questionnaire.

The Navy also finances postgraduate work for many of its officers. According to the latest figures that can be obtained, the average estimated cost for postgraduate education is \$7,108.00.¹⁰ This average figure does not include pay and allowances of the officer.

It must also be realized that even after an officer reports to his new duty station, much of the initial time is spent gaining experience and knowledge. Thus, since the officer during such a phase-in period is learning rather than performing, the phase-in period should be considered as cost which can be related to training cost, however, no dollar value can be easily calculated.

3. Separation Costs. Separation costs are the costs of separating an officer either voluntarily or involuntarily. When an officer is separated voluntarily such as resignation after the end of his obligated

¹⁰ Naval Postgraduate, Monterey, California, Conservative Cost Allocation FY-73, (unpublished).

TABLE IX

LISTING OF A NUMBER OF OFFICER SERVICE
SCHOOL COURSES WITH ESTIMATED COSTS

<u>COURSE</u>	<u>NUMBER OF WEEKS OF COURSE</u>	<u>COST PER CAPITA</u>
Communications Officers (Ashore)	1	\$ 273.00
Communications Officer (Fleet)	15	1,024.00
Damage Control Assistant	10	786.00
DASH	10	3,253.00
Electronics Officers Maintenance	34	4,132.00
Engineering Officer 600/1200 psi	12	1,524.00
General Shipboard Firefighting	1	79.00
Military Justice - Non-Lawyer	5	371.00
Mine Countermeasures Officer	7	950.00
Nuclear Weapons Disposal Phase I	3	987.00
Nuclear Weapons Officer	8	2,008.00
NBC Defense (Afloat)	5	393.00
NBC Defense (Ashore)	6	1,691.00
Radiographic Safety Officer	2	339.00
Shipboard Tactical Data Systems Maintenance	26	1,766.00
SSBN Weapons Officer (POSEIDON)	11	1,558.00
TARTAR Weapons	13	1,894.00
TERRIER Weapons	13	1,850.00
Nuclear Power Training Units	26	5,000.00

service, the only direct cost involved in his separation is his travel and pay and allowances due him. On the other hand, involuntary separations are costly. Regular officers involuntarily separated for failure of selection for promotion are entitled by law for a lump-sum payment of two months basic pay times the number of years of commissioned service or a maximum of \$15,000, whichever is the lesser amount.¹¹

Table X shows the average cost for the involuntary separation of the 160 twice failed select Regular Navy lieutenants who responded to the questionnaire.

TABLE X
AVERAGE SEPARATION COSTS

AVERAGE ACTIVE SERV. IN YEARS (1)	AVERAGE BASIC MONTHLY PAY AT TIME OF SEP. (2)	MAX SEP. PAY BASED ON TITLE 10, U.S. CODE (3)	MAX AMOUNT OF SEP. PAY ENTITLEMENT PAY (4)	LEAVE & TRAVEL PAY (5)	TOTAL SEPARATION PAY (6)
11.5	\$1,266	\$29,118	\$15,000	\$4,326	\$19,326

Column explanation:

(1) Average active service computed based on total service divided by the number of USN lieutenants responding to the questionnaire.

(2) Average basic monthly pay computed based on total pay divided by the number of USN lieutenants responding to the questionnaire

(3) Maximum amount of separation pay based on two months basic pay times the average number of years of active service.

(4) Maximum amount that can be received in accordance with 10 USC 6382 and 10 USC 6387.

(5) Leave and Travel computed based on the average of 55.13 days leave plus average PCS move. PCS cost is based on operational moves of the officer concerned.

(6) Total separation pay that can be received.

¹¹ United States Code, Title 10 - Armed Forces, United States Government Printing Office, Washington, 1971, Vol., 2, pp. 1824 and 1828.

The accumulated total cost that can be attributed to an officer under the eight major programs used for the purpose of this analysis can be found by the formula:

$$TC_S = AC + PRC + PC + SLT$$

Where: TC_S = Total investment cost for the first 11.5 average years of service.

AC = Acquisition cost for a given program.

PRC = Pre-commissioning cost.

PC = Post-commissioning cost.

SLT = Separation, Leave and Travel cost.

Cost figures are indicated on Table XI.

It is emphasized that costs provided on Table XI are estimates which include direct and indirect costs that can be obtained.

Nevertheless, the estimated costs provided, represent an overall view of the amount of investment in an officer at the time he is separated. Also, it should be noted that, although Table XI indicates only eight programs, it does not mean to imply that these are the only programs in the Navy. There are obviously other programs. However, these eight programs provide the necessary cross sectional comparison of the officers being involuntarily separated and a cross section of the Navy in general.

TABLE XI

COMPARISON OF TOTAL INVESTMENT COSTS UNDER
EIGHT DIFFERENT PROGRAMS

PROGRAM (1)	ACQUISITION COST (2)	PRE- COMMISSION COST (3)	POST COMMISSION COST (4)	SEPARATION LEAVE/TRAVEL COST (5)	TOTAL COST (6)
NO NUCLEAR TRAINING					
Naval Academy	\$ 35	\$48,674	\$135,964	\$19,326	\$203,999
NROTC-Regular	50	12,244	123,988	19,326	155,608
NROTC-Contract	50	5,437	111,710	19,326	136,523
OCS	1,397	2,868	112,762	19,326	136,353
NESEP	35	43,280	112,762	19,326	175,403
WITH SURFACE NUCLEAR TRAINING					
Naval Academy	35	48,674	142,606	19,326	210,641
NROTC-Regular	50	12,244	142,906	19,326	174,526
NROTC-Contract	50	5,437	130,630	19,326	155,443
OCS	1,397	2,822	131,684	19,326	155,229
NESEP	35	43,280	131,684	19,326	194,325
WITH SUBMARINE TRAINING (CONVENTIONAL)					
Naval Academy	35	48,674	158,010	19,326	226,045
NROTC-Regular	50	12,244	144,058	19,326	175,678
NROTC-Contract	50	5,437	136,968	19,326	161,781
OCS	1,397	2,822	138,162	19,326	161,707
NESEP	35	43,280	138,162	19,326	200,803

PROGRAM (1)	ACQUISITION COST (2)	PRE- COMMISSION COST (3)	POST- COMMISSION COST (4)	SEPARATION LEAVE/TRAVEL COST (5)	TOTAL COST (6)
WITH SUBMARINE NUCLEAR POWER TRAINING					
Naval Academy	\$ 35	\$ 48,674	\$163,361	\$19,326	\$231,396
NROTC-Regular	50	12,244	163,661	19,326	195,281
NROTC-Contract	50	5,437	149,405	19,326	174,218
OCS	1,397	2,822	150,645	19,326	174,190
NESEP	35	43,280	150,645	19,326	213,286
WITH PILOT TRAINING					
Naval Academy	35	48,674	467,694	19,326	535,729
NROTC-Regular	50	12,244	504,539	19,326	536,159
NROTC-Contract	50	5,437	467,994	19,326	492,807
OCS	1,397	2,822	469,200	19,326	492,745
NAVCAD	1,397	108,228	364,388	19,326	493,339
AVROC	1,397	2,868	475,686	19,326	499,277
AOC	1,397	5,200	463,448	19,326	489,371
NESEP	35	43,280	463,488	19,326	526,129

Column explanation:

(1) The program under which the officer was originally commissioned.

(2) Acquisition costs which are derived from Table VII.

(3) Pre-commissioning costs which are derived from Table VIII.

(4) Post-commissioning costs which are based on the information received from the questionnaire and officer personnel costs literature supplemented by direct information from various offices within the Bureau of Naval Personnel and Naval Education and Training Command.

(5) Separation, Leave and Travel costs are derived from Table X.

(6) Total costs. (AC + PRC + PC + SLT)

Based on the assumption that the average commissioned life of twice failed for selection for promotion of Regular Navy lieutenants is 11.5 years, the total investment cost per officer, at this point ranges from a high of \$516,833 for a NROTC (Regular) with pilot training to a low of \$117,027 for an OCS without nuclear or pilot training.

The average investment cost up to 11.5 years can be derived by taking the average of the total costs presented on Table XI. Assuming that the investment cost presented in the model, (Figure 1) remains constant, it would mean that for each involuntary separation of a twice failed select lieutenant, it will cost an average of \$274,213 to bring a new officer up to the same competency level.

E. RETENTION COST ANALYSIS

To this point only the average per capita cost required to bring an officer to the 11.5 years mark have been considered. This is the average service of a twice failed Navy lieutenant at date of separation.

In order to evaluate whether separating the officer is cost effective, it is necessary to recognize costs under different alternatives. As a consequence of much research, the writer has narrowed the field down to the following alternatives:

1. Retention through the normal promotion flow LT-LCDR-CDR.
2. Provide a 100% promotion for all Regular Navy lieutenants eligible for promotion to lieutenant commander, under the assumption that he will not be selected to commander.

3. Offer Reserve appointments to twice failed select Navy lieutenants for the purpose of continuing them on active duty as USNR officers until completion of 20 years.

The cost model for each of the foregoing conditions are presented on Figure 2. It should be noted that the model represents additive costs beyond 11.5 years of average service.

1. Retention through the Normal Promotion Flow LT-ICDR-CDR.

Under the assumption that the officer is a due course officer, which means that he gets selected and promoted each time he is qualified, it would mean that he will attained the grade of commander before completion of 20 years service.

Although Title 10, U.S. Code guarantees the officer 26 years commissioned service before he can be forced to retire, even though he may failed selection for captain,¹² it is assumed that the officer will retire upon completion of 20 years service. This assumption is made in order to establish a common base under the various conditions presented for cost comparison. The point that should be kept in mind is the fact that a commander cannot be forced to retire on completion of 20 years service without legislative action, i.e. a Hump Bill. Thus, any extension of active duty beyond 20 years will result in additional cost.

The average costs of an officer who gets promoted under the normal promotion cycle and retires at 20 years of service are indicated on Table XII.

¹² United States Code, Title 10 - Armed Forces, United States Government Printing Office, Washington, 1971, Vol. 2, pp. 1822-1823.

Figure 2

MODEL FOR MEASURING THE INVESTMENT COST
UNDER THE MOST FEASIBLE ALTERNATIVES PRESENTED
(ADDITIVE COSTS, 11.5 - 20 YEARS SERVICE)

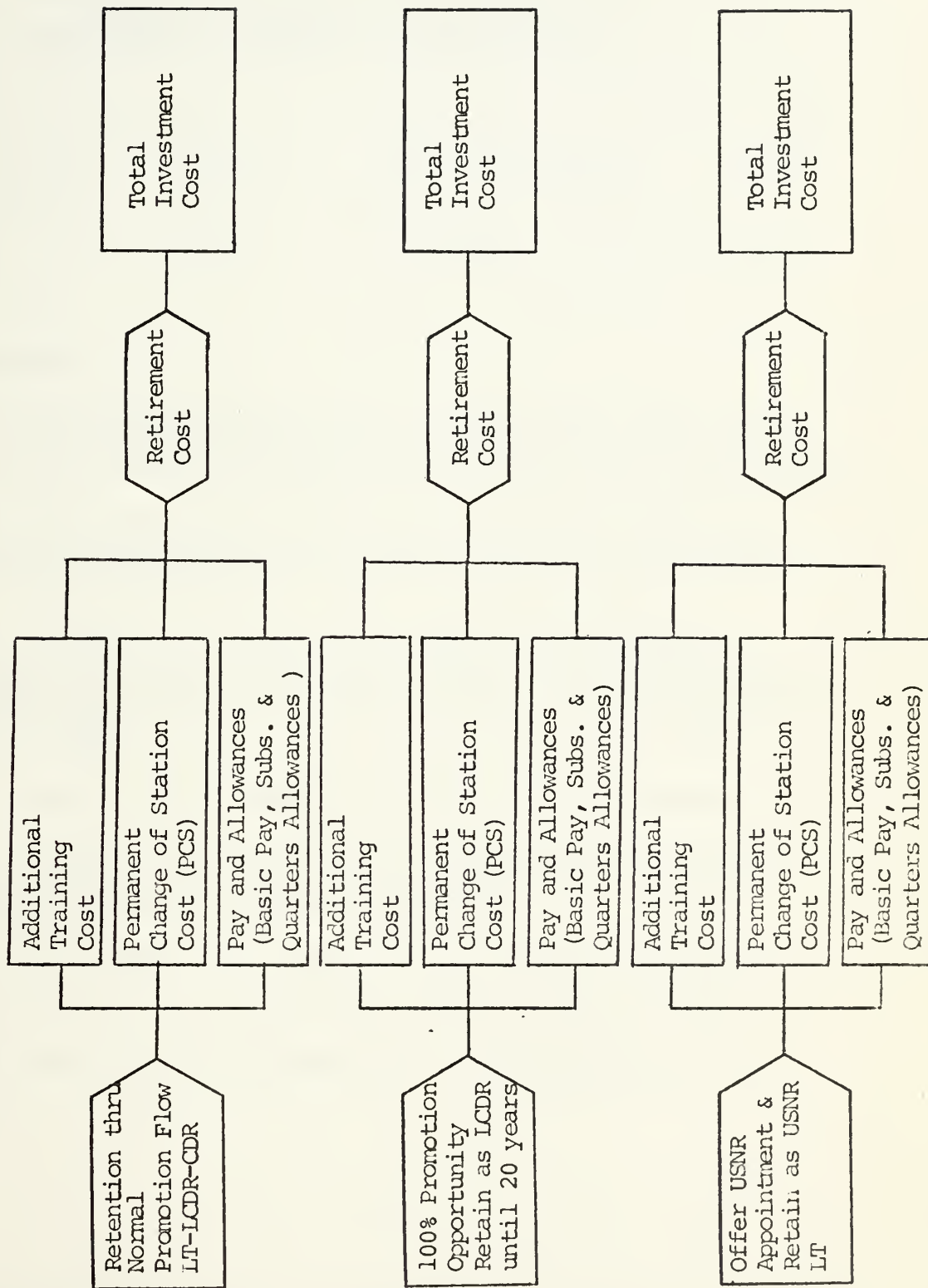


TABLE XII

AVERAGE COST FOR AN OFFICER WHO DOES NOT FAIL
SELECTION FOR PROMOTION (DUE COURSE)
AND RETIRES AT COMPLETION OF 20 YEARS SERVICE

TRAINING COST (1)	PCS COST (2)	PAY AND ALLOWANCES (3)	TOTAL (4)
\$460	\$11,000	\$219,864	\$231,324

Column explanation:

(1) The average training cost is based on Fleet school courses for senior officers such as the XO/PCO course. Most of these courses are short durations and are normally taken enroute to the duty assigned.

(2) Average PCS cost is based on the average PCS (operational move) cost of a commander with dependents multiplied by the average number of anticipated moves.

(3) The pay and allowances is an estimated amount of pay assuming the officer is a "due course" officer. This means that he gets selected and promoted each time he becomes eligible for promotion. The pay computation does not include special pay such as flight pay and submarine pay.

(4) Total. (TRAINING COST + PCS COST + PAY AND ALLOWANCES)

2. Provide a 100% Promotion for all Regular Navy Lieutenants

Eligible for Promotion to Lieutenant Commander.

Title 10, United States Code provides the Secretary of the Navy discretionary powers to establish promotion policies which could include a 100% promotion opportunity for each pay grade below Flag officer.¹³

¹³ United States Code, Title 10 - Armed Forces, United States, Government Printing Office, Washington, 1971, vol. 2, chapter 543, pp. 1722-1747

If a 100% promotion opportunity is established, it will provide for the selection of every qualified Regular Navy lieutenant for lieutenant commander. Thus, the officer can be retained on active duty until completion of 20 years assuming he is not selected for promotion to the grade of commander or voluntarily resigned his commission.

The average costs for a lieutenant commander retained until completion of 20 years service are indicated on Table XIII.

TABLE XIII
AVERAGE COST FOR A LCDR RETAINED ON ACTIVE
DUTY UNTIL COMPLETION OF 20 YEARS

TRAINING COST (1)	PCS COST (2)	PAY AND ALLOWANCES (3)	TOTAL (4)
0	\$8,000	\$178,615	\$186,615

Column explanation:

(1) Training cost is assumed to be zero for a lieutenant commander.

(2) PCS cost is based on the average cost of travel (operational move) of a lieutenant commander with dependents multiplied by the average number of anticipated moves which is considered to be three based on available sources.

(3) This is an estimated amount of pay that the officer would have received if he is continued as a lieutenant commander until completion of 20 years service. This amount does not include special pay such as flight pay or submarine pay. It is also assumed that there is no pay and allowances increase or decrease and that the officer is not promoted to the grade of commander.

(4) Total cost. (TRAINING COST + PCS COST + PAY AND ALLOWANCES)

Because of the current promotion policy within the Navy which allows the promotion opportunity to reduce as an officer advances in grade, there will obviously be great differences in opinions that can be expressed on such an alternative.

These great differences can be attributed to the following:

- a. Personnel ceiling in the grade of lieutenant and lieutenant commander.
- b. What avenues are open for discharging the obviously poor performers.

With regard to personnel ceilings, the Secretary of the Navy has the discretionary power to establish promotion eligibility and thus establish personnel ceilings within each grade. This discretionary power is delineated in Title 10, U.S. Code. Admittedly, a 100% promotion to lieutenant commander could conceivably result in overage in the lieutenant commander grade and shortage in the lieutenant grade. Feasible solution, however, under the circumstances is to impose more restraints on promotion on the first two rank structures (Ensign to Lieutenant Junior Grade and Lieutenant Junior Grade to Lieutenant). Eliminate the poor performers at the early stage of the officer's career which average approximately four years commissioned service thus, reducing the number of officers eligible for promotion to lieutenant commander at the 11.5 years of commissioned service. With these constraints, elimination of the average 5 percent above the zone and 15 percent below the zone selection opportunity it would become feasible to provide 100 percent selection for all eligible

lieutenants without great distortion to the promotion structure.

Another area of concern is what happens to poor performers. How can they be separated with a 100 percent promotion concept? Just as in private enterprise, the Navy is no exception in overlooking poor performers from the early stages of a person's career. Thus, a lieutenant junior grade who for some reason was promoted to lieutenant was later found to be a poor performer and cannot perform the duties of his rank or higher obviously should not be promoted to lieutenant commander. A 100 percent promotion policy, however, does not prevent the Secretary of the Navy from separating such officers.

Section 6384 of Title 10, U.S. Code stipulates that a selection board convened to select officers for promotion,

"Shall report from among those officers eligible for consideration the name of each officer with less than 20 years of service whose record, in the opinion of the board, indicates his unsatisfactory performance of duty in his present grade, and, in the opinion of the board indicates that he would not satisfactorily perform the duties of a higher grade."¹⁴

This provision of Title 10, U.S. Code further stipulates that those officers whose names are reported under this section shall be discharged on 30 June of the fiscal year in which their names are so reported. Thus, if a lieutenant is a poor performer, he can still be separated under statutory provision through the recommendation of a selection board. This statutory provision is applicable for

¹⁴ United States Code, Title 10 - Armed Forces, United States, Government Printing Office, Washington, 1971, vol. 2, pp. 1826-1827.

all grades from Ensign to Captain.

3. Offer Reserve Appointments to Twice Failed Select Navy Lieutenants for the Purpose of Continuing Them on Active Duty Until Completion of 20 Years.

Under this alternative, those officers who failed of selection for promotion to lieutenant commander should be offered Reserve appointment and if accepted, they should be continued on active duty until completion of 20 years or more, depending on the needs of their services. This procedure can be accomplished in accordance with Title 10, United States Code,¹⁵ and the Officer Development and Distribution Manual.¹⁶

On completion of 8.5 years these officers can be retired or involuntarily released to inactive duty if their services are no longer required. The termination of service can be accomplished involuntarily in accordance with existing statutory provisions and policies applicable to Reserve officers on active duty.¹⁷

Approximate additive costs for this category of officer assuming he is not promoted to lieutenant commander are indicated on Table XIV.

¹⁵ United States Code, Title 10 - Armed Forces, United States, Government Printing Office, Washington, 1971, vol. 2, Chapter 35, p. 1285.

¹⁶ Bureau of Naval Personnel, Officer Development and Distribution Manual, Nov. 23, 1974, Chapter VII, Section 7104(h), p. VII-4.

¹⁷ Chief of Naval Personnel, Bureau of Naval Personnel Manual, NAVPERS 15791B, United States, Government Printing Office, Washington, D.C., July 1969, Art. 3830110, pp. 38-13 through 38-16.

TABLE XIV

AVERAGE COST OF A LIEUTENANT WHO IS RETAINED
UNTIL 20 YEARS OF SERVICE

TRAINING COST (1)	PCS COST (2)	PAY AND ALLOWANCES (3)	TOTAL (4)
0	\$6,000	\$167,393	\$173,393

Column explanation:

(1) Training cost is assumed to be zero for a lieutenant who failed selection for promotion.

(2) PCS cost is based on the average cost of travel (operational move) of a lieutenant with dependents multiplied by the average number of anticipated moves which is considered to be three based on available sources.

(3) This is an estimated amount of pay that the officer would have received if he is continued on active duty as a lieutenant until 20 years service. This amount does not include special pay such as flight pay or submarine pay. It is also assumed that there is no pay and allowances increase or decrease and that the officer is not promoted to the grade of lieutenant commander.

(4) Total cost. (TRAINING COST + PCS COST + PAY AND ALLOWANCES)

The major contention to this alternative is the fact that the policies and regulations regarding twice failed select lieutenants are deeply rooted and are difficult to change. Such policies and regulations, however, were administratively established and can be changed. For example, Chapter VII of the Officer Development and Distribution Manual which amplifies Title 10, United States Code, Section 6382 specifically states that Regular Navy lieutenants shall be discharged not later than 30 June of the fiscal year they failed

selection for promotion the second time except in the cases of those lieutenants who are within two years of becoming eligible to retire.

Accordingly, those officers who failed of selection for promotion twice, but are within two years of becoming eligible to retire with pay are offered Reserve appointments. Those officers who accepted are tendered the Reserve appointments for purpose of continuing on active duty until completion of 20 years service or when retirement eligibility is attained at which time they must request for voluntary retirement. Those who do not request voluntary retirement are involuntarily released to inactive duty pursuant to current policy.¹⁸

Thus, compliance of the separation provision of Title 10, United States Code and separation policies regarding twice failed select Regular Navy lieutenants does not bar the Secretary of the Navy from appointing such officers in the Naval Reserve and continuing them on active duty as Reserve officers.

4. Costs of Retirement Benefits.

Since retirement benefits are also costs to the government and the tax payers, these costs must also be considered.

The U.S. military retirement system, as presently designed, functions to permit withdrawal of career personnel from the military establishment at relatively young ages, in order to prevent the organization from being dominated by those too old for the rigors of military life and to insure that maintenance of "youth and vitality"

¹⁸ Chief of Naval Personnel, Bureau of Naval Personnel Manual, NAVPERS 15791B, United States, Government Printing Office, Washington, D. C., July 1969, Art. 3830110, pp. 38-13 through 38-16.

will provide a combat effective organization. The removal of superannuated personnel is a common objective of all retirement systems; however, the military system is virtually unique with respect to the early age at which the withdrawal of career members is mandatory or encouraged. Consequently, every career military officer ultimately faces involuntary retirement from military service.

Given the present assumptions concerning manpower requirements (youth and vitality) and resultant methods of personnel management, retirement of twice failed select officers is established at completion of 20 years of active service, with average age of 43 - 50.

It is realized that in computing retirement benefits, time period factors are uncertain since the specific age at which an individual will die is unknown. However, expected value criteria considers the uncertainty of future events to aid the individual in decision making. This criteria weights the value of an outcome with the probability that the outcome will occur. The probability of death for any particular age or number of years can be computed from observations contained in standard mortality tables and used to weight the total value of retirement benefits.¹⁹ The standard mortality table used in this analysis is presented on Table XV. The expectation of life for any given age provides a mathematical average of the number of years which one can expect to live.

¹⁹ Life Insurance Fact Book, New York: Institute of Life Insurance, 1972, pp. 108-109.

TABLE XV

COMMISSIONER'S 1958 STANDARD ORDINARY MORTALITY TABLE
 TAKEN FROM THE LIFE INSURANCE FACT BOOK, NEW YORK, INSURANCE
 OF LIFE INSURANCE

<u>AGE</u>	<u>LIFE EXPECTANCY (YEARS)</u>	<u>AGE</u>	<u>LIFE EXPECTANCY (YEARS)</u>
30	41.25	51	22.82
31	40.34	52	22.03
32	39.43	53	21.25
33	38.51	54	20.47
34	37.60	55	19.71
35	36.69	56	18.97
36	35.78	57	18.23
37	34.88	58	17.51
38	33.97	59	16.81
39	33.07	60	16.12
40	32.18	61	15.44
41	31.29	62	14.78
42	30.41	63	14.14
43	29.54	64	13.51
44	28.67	65	12.90
45	27.81	66	12.31
46	26.95	67	11.73
47	26.11	68	11.17
48	25.27	69	10.64
49	24.45	70	10.12
50	23.63	71	9.63

Thus, in this analysis, retirement benefits computation will be weighed by the applicable life expectation to include the element of uncertainty.

The total retirement benefits can be found by the formula:

$$TC = BP \times R \times LE$$

Where: TC = Total retirement cost based on retirement at
20 years active duty.

BP = Base pay at date of retirement.

R = Percentage rate applied in computing retirement
benefits.

LE = Life expectancy based on average age.

Based on the foregoing formula, the approximate costs resulting from retirement after completion of 20 years active service are indicated on Table XVI.

The estimates presented on Table XVI are based on the following assumptions:

1. Basic pay used in the computation is based on current pay table approved October 1, 1974.
2. Average age is 42. This average is assumed to be a realistic average, since the average service entry age for officers who generally complete four years of college training before entry into service is 22 years.
4. Discount rate or possible pay increases are not applied.

TABLE XVI

RETIREMENT AFTER 20 YEARS OF ACTIVE DUTY BASED ON
CURRENT RETIREMENT SYSTEM

GRADE (1)	AGE AT RETIREMENT (2)	LIFE EXPECTANCY (3)	RETIREMENT ANNUITY (4)	CUMULATIVE ANNUITIES (5)
Lieutenant	42	30.41	\$ 8,305	\$252,555
Lieutenant Commander	42	30.41	9,459	287,648
Commander	42	30.41	10,927	332,290

Column explanation:

(1) Rank at retirement.

(2) Average age at retirement.

(3) Life expectancy at age 42 based on 1958 Mortality Table taken from the Life Insurance Fact Book, New York, Institute of Life Insurance, 1972, pp. 108-109.

(4) Retirement annuity (50% of Basic Pay at date of retirement).

(5) Cumulative total based on life expectancy (Column 3 x column 4 = column 5).

The accumulated total cost that can be considered as additive costs if the officer scheduled for involuntary separation is retained on active duty until 20 years and then retired, can be found by the formula:

$$TC_r = AT + PCS + PA + RC$$

Where: TC_r = Total additive costs if the officer is retained on active duty until completion of 20 years and then retired.

PCS = Additional Permanent Change of Station costs.

PA = Pay and Allowances. This is based on current pay rates and incremental increases as a result of service longevity. However, it does not include cost of fringe benefits such as, commissary, exchange, etc.

RC = Cost of retirement derived from Table XVI.

Cost figures are indicated on Table XVII.

F. COMPARISON OF COSTS

The two cost models introduced earlier should be viewed in terms of cost streams to the government, thereby conceptualizing a gross assumption of differences in costs viewed as a continuing stream of outlays. The foregoing assumption is depicted in Figure 3. Figure 3 shows the stream of costs under the current policy and the three feasible alternatives previously presented.

COMPARISON OF TOTAL INVESTMENT COST FOR AN ADDITIONAL
8.5 YEARS OF SERVICE AND RETIREMENT

	ADDITIONAL TRAINING COST (1)	ADDITIONAL PCS COST (2)	PAY AND ALLOWANCES COST (3)	CUMULATIVE RETIREMENT COST (4)	TOTAL (5)
Due Course Officer Promotion (LT-LCDR-CDR)	\$460	\$11,000	\$219,864	\$332,290	\$563,614
Provide a 100% Promotion Opportunity (Retain as LCDR)	0	8,000	178,615	287,648	474,263
Offer USNR Appointment and Retain as Reserve LT	0	6,000	167,393	252,555	425,948

Column explanation:

(1) Additional Training Cost. While it is highly conceivable that an officer continued on active duty can incur additional training cost, it is assumed that the Navy will try to minimize further training for those categories of officers who failed selection for promotion. Therefore, since it is assumed that these officers will not received further training, the cost for additional training is zero except that of the "due course" officer.

(2) Permanent Change of Station (PCS) costs based on information received from the Bureau of Naval Personnel.

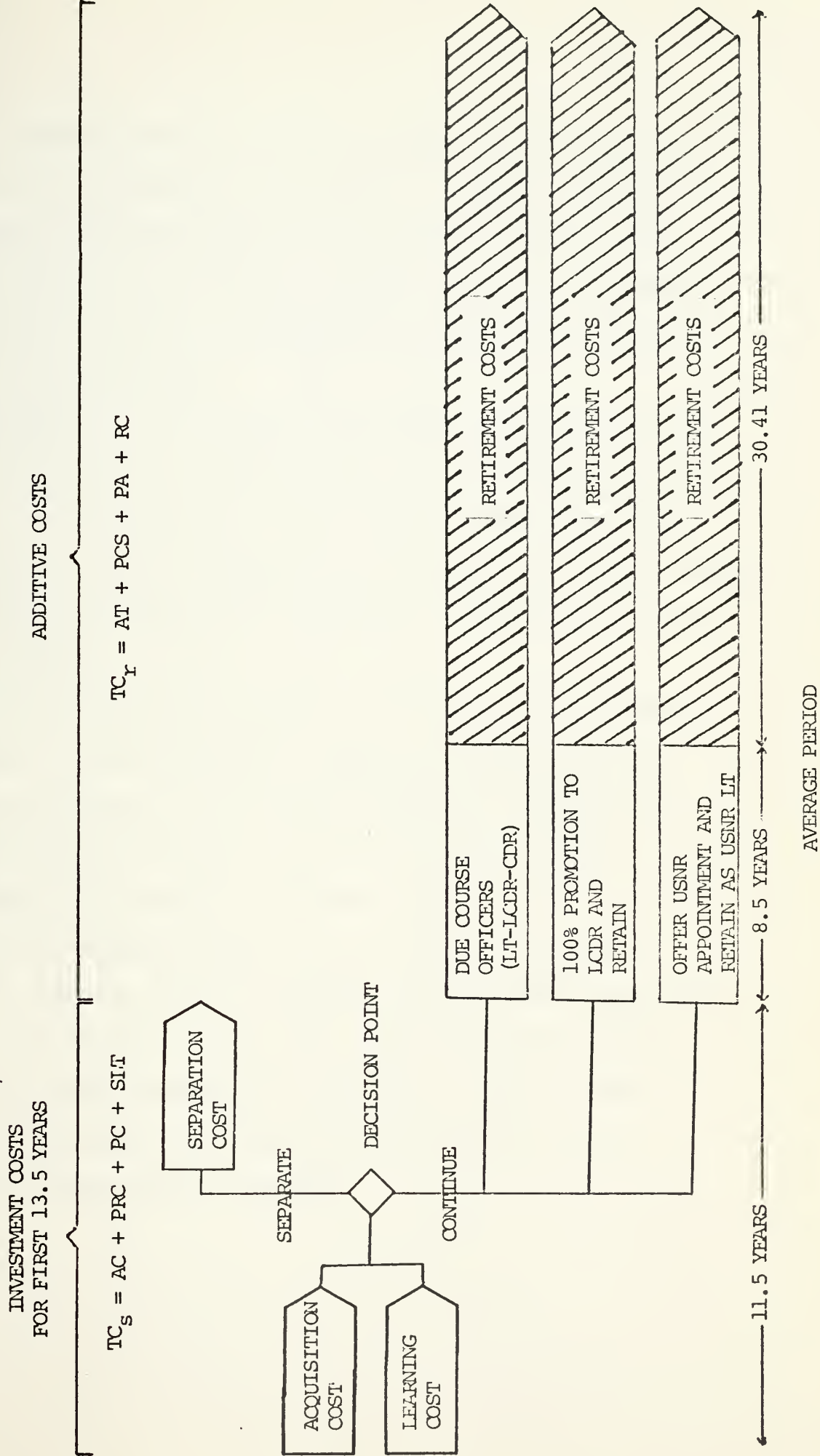
(3) Pay and Allowances. These costs are cumulative totals derived from Tables XII, XIII and XIV.

(4) Cumulative retirement costs. These costs are derived from Table XVI.

(5) Total investment beyond the 11.5 years of service. (AT + PCS + PA + RC)

Figure 3

COST STREAM MODEL
(INTEGRATION AND EXTENSION OF THE COST MODELS
PREVIOUSLY PRESENTED)



Cost figures under the present policy and those of the proposed alternatives are presented on Table XVIII. It should be noted that the figures presented on Table XVIII are lower limit costs. Other variable costs such as, commissary, exchange, pay increases, medical, etc., are not included in the computation. Additionally, a discount rate has not been applied.

Although the costs indicated on Table XVIII appear to show that it cost more to retain an officer than it is to separate him, it should be noted that the additive cost for 8.5 years is fixed cost. This means that this cost will continue to be an outlay in the form of paying another officer whether or not a lieutenant is separated or continued and then retired.

Thus, the significant costs that must be assumed in this study is whether it is cost effective to separate an officer after 11.5 years of service with a total average investment of \$274,213, or retain him knowing that after 20 years of service the officer will retire with retirement benefits for life.

With this assumption Table XIX is presented for comparison. A review of Table XIX show a difference of \$21,658 between separating a twice failed select Navy lieutenant and retaining him on active duty. While the difference in cost do not appear to be of great economic significant, it is worthy of consideration for further cost effectiveness study in this area.

TABLE XVIII

COMPARISON OF COSTS

	AVERAGE INVESTMENT COST FOR FIRST 11.5 YRS SERVICE	AVERAGE COST FOR ADDITIONAL 8.5 YEARS OF SERVICE	CUMULATIVE RETIREMENTS ANNUITIES BASED ON AVERAGE LIFE EXPECTANCY (20 YR RET., AGE 42)	
				TOTAL INVESTMENT
Due Course Officer, Promotion every time he is qualified LT-LCDR-CDR	\$254,887	\$231,323	\$332,290	\$818,500
Provide a 100% Promotion Opportunity (Promote every Lieutenant who Performs Satisfactorily and is Qualified for Promotion)	254,887	186,615	287,648	729,150
Offer Reserve Appointments to Twice Failed Select Lieutenants for the Purpose of Continuing Them on Active Duty	254,887	173,393	252,555	680,835
Involuntary Separation Due to Current Policy	274,213	- 0 -	- 0 -	274,213

TABLE XIX

AVERAGE COST TO SEPARATE VERSUS RETIREMENT COST
(EXCLUDING FIXED ADDITIVE COST FOR 8.5 YEARS)

SEPARATION COST

$$(TC_s = AC + PRC + PC + SLT)$$

\$274,213

RETIREMENT BENEFIT COST

$$(TC = BP + R + LE)$$

\$252,555

Additionally, it should be noted that there is significant difference between the costs of retaining a twice failed select Navy lieutenant and a due course officer. For example, in the case of a due course officer who retired at 20 years service, it will cost the government and tax payers an average of \$818,500 in the form of investment. On the other hand retention of a twice failed select lieutenant until 20 years will only cost an average of \$680,835.

Thus, retention of a twice failed select lieutenant could result in cost savings in the average amount of \$137,665.

V. SUMMARY OF FINDINGS

Having identified and chosen a sample of the population of twice failed select Regular Navy lieutenants, and after an analysis of the policies, regulations and the completed questionnaire regarding this category of officers, the following conclusions are made:

1. Twice failed select lieutenants are separated in accordance with Title 10, United States Code and Chapter VII of the Officer Development and Distribution Manual. There is no exception to this policy except in the case of those twice failed select lieutenants who are within two years of becoming eligible to retire with pay. Those who are within two years of becoming eligible to retire are offered Reserve appointments. If they accept the Reserve appointments, they are retained until retirement eligibility is attained. Such retention is solely for retirement purposes. There is no written policy or any evidence that could be found by the writer to indicate that twice failed Navy lieutenants who are not within two years of becoming eligible to retire with pay are considered for retention prior to their separation, except when the individual officer requests for consideration. Available records revealed, however, that none of those who requested consideration was continued.

2. In the area of officer promotion, the Officer Personnel Act of 1947 provides the officer promotion machinery for each of the armed services. Among other things, this act establishes categories

of officers for promotion purposes, and from these categories, zones of promotion are established. These "promotion zones," as they are called, are established by the service secretaries prior to the convening of the appropriate promotion selection board. The size of the promotion zone is a function of several factors. The basic ones are:

(a) The number of vacancies expected to exist in the next higher grade.

(b) A rough approximation of the desired promotion rate (percentage of officers in the promotion zone to be selected).

(c) The time in grade for an officer in his present grade. Promotion selection boards, however, are not tightly bound to the approximate promotion rate envisioned by the service secretaries; therefore, actual promotion rates can vary from year to year. Additionally, each service secretary has the discretionary power to authorize a 100% promotion in any grade other than Flag officers.

3. Results of the Survey revealed that:

(a) Most twice failed select Regular Navy lieutenants are separated for reasons other than for cause and performance. Of the 160 who responded to the questionnaire, 97.5 percent have indicated that they have not received any unfavorable or unsatisfactory fitness report during the period of their commission. The remaining 2.5 percent who indicated having received an unsatisfactory or unfavorable report, all have stated that the specific reports have little effect in their non-selection for promotion to lieutenant commander.

(b) They all indicated that the Navy is their career. Additionally, most of the officers are married and responsible family men. Of the 160 who responded to the questionnaire, 142 or 88.75 percent are married with dependents.

(c) They are as a group, highly educated and technically trained. For example, the 160 who responded to the questionnaire, 100% have graduated from college, 17.5 percent have received the Master of Science Degree from the Naval Postgraduate School, Monterey, California, and although not tabulated, a substantial number of the respondees have indicated that they have completed their postgraduate education through off duty hours. Additionally, each officer has gone through several technical courses offered by the various Navy Fleet Schools.

(d) Responses to the questionnaire also revealed that most of the officers possess a myriad of expertise and professional knowledge which would definitely make them assets to the Navy. This is particularly true in the case of those officer commissioned through the Navy Enlisted Scientific Education Program (NESEP) and Naval Academy. A total of 69 or 43 percent of respondees were commissioned through the NESEP and Naval Academy programs.

4. The cost analysis revealed that there is no great economic difference whether a twice failed select Navy lieutenant is separated or continued on active duty until completion of 20

years service. Specifically, the difference is an average cost of \$21,658 per capita. However, in comparing the cost between retaining a twice failed select Navy lieutenant and that of a due course officer (an officer who gets selected and promoted every time he becomes eligible), the difference is \$137,665, average cost per capita.

VI. DISCUSSION AND CONCLUSION

The original purpose of this thesis as described earlier was to determine whether it is more cost effective to separate twice failed select Navy lieutenants than it is to continue them on active duty.

In analyzing the data gathered with cost estimates, three alternatives were presented. These were:

1. Retention of a due course officer. This is the officer who gets selected and promoted each time he was eligible for promotion.
2. Provide a 100% promotion opportunity to every eligible lieutenant who has performed satisfactorily.
3. Offer a Reserve appointment to every twice failed select lieutenant for the purpose of continuing him on active duty.

During the course of gathering data, one area seems very clear in that one of the mistakes often made by top management is the fact that involuntary separation costs for twice failed select officers are considered as if it had an end all its own, with a special place in the national budget. Such is not the case. Every dollar invested in an officer's acquisition, learning and separation subtracts that much from the resources available to the entire Navy establishment that could be allocated for operational support.

Therefore, when viewing cost to the Government with respect to involuntary separation, it appears that management should recognize

the technical character and more complex nature of our military forces.

First, adequate personnel strength and viability is necessary in maintaining a ready and responsive posture to mission requirements of the service. Without quantity and quality of people in both the officer and enlisted corps to man its weapons and support systems, the Navy would be sorely pressed to meet its role as a deterrent to world aggression.

Second, training costs relative to the operation, maintenance, and administration of today's sophisticated weapon systems have been astronomical; and high turnover of personnel is a significant factor in defense cost effectiveness. For example, the average training costs of a pilot now exceeds a quarter of a million dollars. It is certainly conceivable that it will not be long before a pilot will have a one million dollar price tag before he ever assume his first operational billet.

Admiral Bagley, former Chief of Naval Personnel puts it very bluntly when he stated in the October 1974 Officer Personnel Newsletter that:

"At no time in the history of the U.S. Navy has the need been greater for highly competent, technically trained unrestricted line officers. The requirements both ashore and afloat for highly motivated URL officers possessing this 'valuable commodity' continues to grow at a rate far greater than our resources (money and qualified candidates) are able to provide."

Technological advancements, therefore, clearly indicate that a greater need currently exists to maintain a high quality officer community by improving management in the fields of career planning, education, and utilization of officer abilities.

Most if not all, of the twice failed select officers have met the foregoing criteria. This is supported by the following facts obtained from the respondees to the questionnaire used for this study:

1. 100% percent have indicated that the Navy is their career, which is indicative of highly career motivated individuals.

2. 97.5 percent have indicated that they never receive any unsatisfactory or unfavorable report and that non-selection for promotion came as a great surprise. The 2.5 percent who have indicated that they have received unsatisfactory or unfavorable fitness report during the period they were commissioned also stated that the fitness report in question have little effect in their failure of selection for promotion. This points out the fact that most of the officers are satisfactory performers, which means that non-selection can be attributed to:

- (a) Lack of career enhancing billets.

- (b) Poor management in the officer career patterns.

- (c) The officers were caught in a numbers game which dictates that only so many will be promoted regardless of qualifications and/or requirements.

3. In spite of the circumstances that these officers were in (essentially thrown out of the service after 11.5 years of faithful and satisfactory service), many were willing to continue serving the Navy either as Reserve officers without further promotion opportunities or as enlisted men. This is supported by the fact that of the 160 who responded to the questionnaire, 76 percent were willing to accept a Reserve appointment and continue serving on active duty as lieutenants. Further, 23% were willing to enlist and continue serving the Navy as enlisted men if a Reserve appointment is not possible.

4. The fact that all of the officers have completed a four year college education with a substantial number achieving graduate level degrees is indicative that this group of officers are highly educated. Additionally, responses to the questionnaire revealed that most of these officers have varied experience and technical expertise such as electronics, engineering, aviation maintenance, nuclear weapons, etc.

In view of the foregoing, the writer feels that top management should review the current policies and regulations that affects twice failed select officers with the aim of optimizing the utilization of these officer resources and at the same alleviating the junior officer retention problems.

In the area of cost effectiveness, the writer concludes that there is no great economic difference whether a twice failed select lieutenant is continued or separated.

However, the models presented in figures 1, 2 and 3 used in making analytical determinations in this thesis indicate the kinds of variables which need to be considered in developing a valid and reliable measure of an investment in a twice failed select Navy lieutenant.

The models can help management to understand more fully the nature of the problems and the importance of distinguishing between an individual's realizable value to the Navy, a distinction often overlooked in practice.

In considering the alternatives presented in this thesis, several factors should be kept in mind:

First, the proposed alternatives are workable within the current legal framework. Specifically the alternative which provides for a 100% promotion opportunity or offer Reserve appointments to twice failed select lieutenants are in support of the Navy's current effort to retain officers with experience and expertise.

Second, the alternatives presented could provide the much needed incentive for junior officer retention in a draft free environment. Such incentives could be in the form of an assured career even for those who have had the misfortune to be assigned to inferior billets in the early portion of their careers.

Another consideration that should be made is the morale factors of an involuntary separation both from the viewpoint of

of the individual officer, his family and society. Although morale factors are not measurable in dollar value, it could have significant impact on the Navy's junior officer retention effort and the well being of the family.

If the Navy feels that it has a moral obligation to retain twice failed select lieutenants who are within two years of becoming eligible to retire solely for that officer to attain retirement eligibility, then it should have the moral obligation to continue those officers who fail of selection for promotion through no fault of their own, but who are not within two years of becoming eligible to retire.

VII. SUGGESTION FOR FURTHER STUDY

A questionnaire form has been used to determine the type of U.S. Navy lieutenant who failed selection for promotion. Further, several cost analysis were made to determine investment costs that could be applied to this category of officers.

Although it should not be inferred that the analysis presented purports to explain the nature of investment costs fully, or that the variables are validated completely, the data obtained in the study supports the validity of the hypothesized relationships.

However, only the average costs were included in the models. Actual costs were eliminated because of time constraints for the research and the difficulty of obtaining actual costs.

Thus, it is suggested that further research in this area include actual costs. Also, the model should be expanded to include fringe benefits cost such as commissary and exchange privileges which were excluded from the cost analysis.

APPENDIX A

NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA 93940

Code 55cf (JTN)

Operations Research and Administrative
Sciences

Dear Lieutenant

The enclosed questionnaire is being forwarded to a selected sample of USN officers who have been notified of their scheduled separation from active service due to failure of selection for promotion for the second time. The purpose of the questionnaire is to obtain relevant statistical information in connection with an original research regarding the involuntary separation of USN officers who failed selection for promotion the second time.

The undersigned believes that problems exist in this area which have not been thoroughly studied. The purpose of the study is to determine alternative actions that could save the Navy the annual loss of many outstanding officers.

The responses obtained in answer to this questionnaire will be compiled and treated statistically for the purposes of this research. Individual responses and comments will be held in the strictest confidence by the undersigned and no individual reference which would permit personal identification will be used in any report.

It is respectfully requested that you complete the enclosed questionnaire and return it in the enclosed self-addressed envelope at your earliest convenience.

Your cooperation in answering all applicable questions frankly according to your own feelings and in adding any comments desired will be greatly appreciated.

Sincerely,

J. W. Creighton, BS, BA, Ph.D.
Professor of Management
Naval Postgraduate School

APPENDIX B

OFFICER INFORMATION SURVEY

PLEASE ANSWER EACH QUESTION AS ACCURATELY AS POSSIBLE. EXPAND ON ANY ANSWER OR ADD FURTHER INFORMATION YOU DESIRE IN THE SPACE PROVIDED AT THE END OF THE QUESTIONNAIRE.

1. What is your current officer status? ☐ USN ☐ USNR

2. What is your current designator? _____

3. Do you have a previous designator?

Yes. Designator was _____

No. ☐

4. When were you first commissioned? (Please indicate in the blank the month and year)

_____ as USNR

_____ as USN

5. Source of your commissioning?

- ☐ U.S. Naval Academy
- ☐ NROTC (Regular)
- ☐ NROTC (Contract)
- ☐ OCS
- ☐ Direct from Enlisted status
- ☐ Direct from Warrant status
- ☐ NAVCAD Program
- ☐ Augmentation Program
- ☐ NESEP Program
- ☐ Other (What?) _____

6. Please indicate below all the service schools attended and completed while on active duty. (Examples are: nuclear power schools, electronics school, communication officers school)

TYPE OF SCHOOL

DURATION

7. Did you take any undergraduate work at a college, university, or Naval Postgraduate School, Monterey sponsored by the Navy?
- ☐ Yes.
- ☐ No.
8. If the answer to 7 above is YES please complete the following.
- Undergraduate work study taken at _____
(Name of college/university)
- Curriculum _____
(Major or curriculum number)
- Duration of the curriculum _____
- Type of Degree received _____
9. Did you take any postgraduate work at a college, university or Naval Postgraduate School in Monterey while in service?
- ☐ I did not take any postgraduate work while in the service.
- ☐ I took postgraduate work at _____
(college or university)
- ☐ I took postgraduate at the Naval Postgraduate School.
Course curriculum was _____
10. At the time you were notified of your pending separation because of failure of selection for promotion you were :
- ☐ Married
- ☐ Widow
- ☐ Divorced or Separated (wife or ex-wife dependent for some support)
- ☐ Divorced or Separated (wife or ex-wife not dependent for support)
- ☐ Not married
11. Number of dependent children at the time you were notified of your pending separation? (Please indicate on the blank space the number)
- _____ Over 12 years of age
- _____ Under 12 years of age
12. Do you have other dependents besides wife and/or children?
- ☐ Yes. If YES please indicate the number: Over 12 years _____
Under 12 years _____
- ☐ No.
13. Please indicate the total amount of active duty as of 30 June 1975 on the appropriate blank below:
- _____ Years of active duty as enlisted.
- _____ Years of active duty as officer.

14. Total number of military moves (transfers) of which dependents were not included (but travel expenses were required). These are transfer orders which require you to attend schools for short duration or for certain duty assignments in which you are not authorized to move dependents under government expenses.

Number of moves _____

15. Number of moves as a result of Permanent Change of Station orders in which dependents were authorized move under government expenses. _____

16. Please indicate on the following blank your current pay status:

Amount of base pay: \$ _____
BAS: _____
BAQ: _____
Special pay: (i.e. Submarine pay, _____
Flight pay, Diving pay, etc. _____

17. Did you ever receive any special compensation as a form of incentive to remain on active duty? (i.e. nuclear submarine, medical officer, etc?)

☐ Yes. Total amount received \$ _____
☐ No.

18. Were you aware when you first failed selection for promotion?

☐ Yes.
☐ No.

19. Do you feel that the reason for your non-selection for promotion was because of the lack of career enhancing billet which you were assigned to?

☐ Yes.
☐ No.

20. When you knew that you failed of selection for promotion the first time, did you try to reach your detailer to discuss reassignment to a billet that may be more career enhancing?

☐ Yes.
☐ No.

21. During the time that you held a commission in the Navy or Naval Reserve, did you receive any (one or more) unsatisfactory or unfavorable fitness reports?
- ☐ Yes.
- ☐ No.
22. If your answer to question 21 above is YES, do you feel that this fitness report(s) was(were) unjustified? (Please mark only one answer).
- ☐ Definitely unjustified.
- ☐ Somewhat justified.
- ☐ Completely justified.
23. What effect did this (these) report(s) have in your failure of selection for promotion?
- ☐ Tremendous effect.
- ☐ Great effect.
- ☐ Little effect.
24. Prior to being notified of your pending separation, did you intend to make the Navy a career?
- ☐ Yes.
- ☐ No.
25. If the Navy offers you an appointment in the Naval Reserve after you are discharged for the purpose of continuing on active duty, would you accept the appointment?
- ☐ Yes.
- ☐ No.
26. If you cannot be appointed in the Naval Reserve, but the Chief of Naval Personnel offered you the opportunity to enlist after discharge in order to serve on active duty in an enlisted status, would you enlist?
- ☐ Yes.
- ☐ No.

27. If your answer to 26 above is YES what would be the highest enlisted grade you will be willing to enlist in?

☐ E-3

☐ E-7

☐ E-4

☐ E-8

☐ E-5

☐ E-9

☐ E-6

28. Please indicate below the number of days of leave that you will have accumulated at date of separation.

Number of days _____

29. Are you now currently filling a billet that would require a contact relief?

☐ Yes.

☐ No.

30. What is your present duty station?

31. Which of the following do you intend to select for the purpose of moving your household after separation?

☐ Home of Record.

☐ Home of Selection.

32. Which of the following is considered the farther away from your current duty station for purpose of travel and movement of household goods?

☐ Home of Record.

☐ Home of Selection.

33. If you have any comments or recommendations regarding the Navy's policy and/or management of twice fail select officers, please write it below as fully as you like. Additional pages may be used if desired.

APPENDIX C

RELEVANT COMMENTS/RECOMMENDATIONS FROM TWICE FAILED SELECT NAVY LIEUTENANTS

<u>RELEVANT COMMENTS/RECOMMENDATIONS</u>	<u>NUMBER MAKING RESPONSE</u>
Fitness Report System	6
The Bureau of Naval Personnel should notify the officer when he failed selection and advise him of short comings and provide training or counseling to improve his chances for promotion the next time he is considered	1
Comments on lack of planning moves or early rotation particularly for those overseas with families	5
Twice failed select officers who must be involuntarily separated should have some form of retirement pension similar to that offered civilian employees under the pension Reform Act of 1974	1
Comments relating to establishment of some form of a continuation board to further review the involuntary release of twice failed select officers to determine future potential and service to the Navy.	14

RELEVANT COMMENTS/RECOMMENDATIONSNUMBER MAKING RESPONSE

Comments relevant to the waste of time and cost to the Navy to select and send to postgraduate school for those officers who do not appear likely to be promoted.	4
Job placement or some form of assistance should be provided to assist twice failed select officers who must be involuntarily separated because of failure of selection for promotion.	4
Twice failed select officers should be automatically offered USNR commission in order to remain on the Naval Reserve as a cost saving to the Navy.	1
Detailing policy by the Chief of Naval Personnel is very poor with respect to accommodating the individual officer assignments that fall within a favorable career pattern.	15
Comments relevant to inability by the Chief of Naval Personnel to provide some information regarding reason for failure of selection and to provide some form of guidance or reassignment of duties to enhance promotion opportunities.	24

RELEVANT COMMENTS/RECOMMENDATIONSNUMBER MAKING RESPONSE

The current policy for the involuntary separation of USN lieutenants who failed selection twice is basically a good policy.	3
Comments relevant to the deficiency of severance pay and a maximum 60 days accrued leave that can be paid	2
Comments relevant to providing 100% promotion opportunity for LCDR which is at the average of 11 years service and provide for forced attrition at an earlier period thus providing better opportunity for those separated to seek a second career.	1

BIBLIOGRAPHY

- Bureau of Naval Personnel, The Officer Personnel Newsletter, Washington, D. C., December, 1973, p. 3.
- Bureau of Naval Personnel, The Officer Personnel Newsletter, Washington, D. C., October, 1974, p. 3.
- Bureau of Naval Personnel, The Officer Personnel Newsletter, Washington, D. C., Spring 1975, p. 2.
- Bureau of Naval Personnel, Director Promotion and Retirement Division, Memorandum, Pers-481-bl, December, 1974.
- Bureau of Naval Personnel, Register of Commission and Warrant Officers of the United States Navy and Reserve Officers on Active Duty, NAVPERS 15,0818, Washington, D. C., December 31, 1974, pp. VII-VIII.
- Bureau of Naval Personnel, Officer Development and Distribution Manual, Chapter VII, section 7104(h), November 23, 1974, p. VII-4.
- Bureau of Naval Personnel, Bureau of Naval Personnel Manual, NAVPERS 15791B, United States Government Printing Office, Washington, D. C., July, 1969, Article 3830110, pp. 38-13 through 38-16.
- Hitch, Charles J. and McKean, Roland N., The Economic of Defense in the Nuclear Age, Cambridge; Harvard University Press, 1963, p. v.
- Institute of Life Insurance, Life Insurance Fact Book, New York, 1972, pp. 108-109.
- Naval Personnel Research and Development Laboratory, Officer Personnel Costs, WOS 71-4, Washington, D. C., 1971.
- Naval Postgraduate School, Conservative Cost Allocation FY-73, Monterey, California (unpublished).
- United States Code, Title 10 - Armed Forces, United States Government Printing Office, Washington, D. C., 1971, vol. 2.

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